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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/851,404	SCHOHN ET AL.	
	Examiner	Art Unit	
	James H. Blackwell	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,16,17,19-43 and 45-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,16,17,19-43 and 45-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 May 2001 & 06/22/2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to an amendment filed 03/25/2008.

Claims 1-14, 16-17, and 19-43, 45-56 remain pending with this amendment.

Claims 1, 36, 38, 41-42, 53 and 56 are independent claims.

Claims 15 and 44 were cancelled and their subject matter incorporated into the independent claims.

Claim 56 is a new claim.

Rejection of Claims 41 and 49-50 under 35 U.S.C. § 101 have been withdrawn based on arguments provided in this response by the Applicant citing transformation system modules employed in various locations including wireless gateways and an origin server.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the recited "*directing a user to the later portion in response to opening of the document*" of Claim 17. The Specification does not mention this recited subject matter. Thus, there is no support or antecedent basis for the recited "*directing a user to the later portion in response to opening of the document*" that allows the meaning of the phrase to be ascertained, as required in 37 CFR 1.75(d)(1).

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the recited "*medium*" of Claim 38. The Specification does not describe the recited "*medium*" in a way that allows the meaning of the term to be ascertained, as required in 37 CFR 1.75(d)(1).

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the recited "*storage medium*" of Claim 56. The Specification does not mention the recited "*storage medium*." Thus, there is no support or antecedent basis for the recited "*storage medium*" that allows the meaning of the term to be ascertained, as required in 37 CFR 1.75(d)(1).

Drawings

The drawings are objected to because:

- the text in Figures 1A, 1B, 3, 5, 6, 7A, 7B, 7C, 8A, 8B, 9, 11 and 13-15 is small, unfocused and/or difficult/impossible to read; and
- the stippling/shading in Figures 1A, 1B, 3, 5, 6, 7A, 7B, 7C, 8A, 8B, 9, 11 and 13-15 makes the text in the figures difficult/impossible to read.

Applicant should amend the drawings so that all wording in the figures is easily readable.

Figures 1A and 1B should be designated by a legend such as — PRIOR ART — because, as indicated in the Specification (see Page 2, Lines 7-12), only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1, 36, 38, 41, 42, 53 and 56 are objected to because of the following informalities:

- In Claim 1, the phrase "*enabling presentation of the portions in the different order in which the reorganization information*" in Lines 10-11 should be amended to — enabling presentation of the portions in the different order, ~~in which~~ wherein the reorganization information — so that the limitation reads more clearly and conforms with United States patent practice. Claims 36, 38, 41, 42, 53 and 56 have the same problem.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 7-14, 16-17, 19-20, 22-25, 29-43, 45-47, and 49-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyler (U.S. Patent No. 7,047,033

B2 filed 01/31/2001, published 05/16/2006), in view of Hirose et al. (hereinafter Hirose, U.S. Patent No. 6,973,619 filed 06/30/1999, issued 12/06/2005).

In regard to independent Claim 1, Wyler discloses:

- *receiving an electronic document represented by serial data that contains content of the document and defines an order in which respective portions of the content are to be presented on a display for viewing* (at least Col. 1, line 54 through Col. 2, line 40; Col. 27, line 16 through Col. 28, line 50 → describes a method for processing information received by a wireless device over a computer network from at least one source of information (e.g., markup languages such as HTML, Rich Text Format, Scripts; see Col. 11, line 38 through Col. 12, line 29), parsing at least some of the information and employing at least some results of the parsing to provide the information in a form suitable for display to a user on the wireless device. Markup language sources of content, such as HTML markup, were known by those of ordinary skill in the art at the time of invention to typically contain markup tags which at least in part, implicitly *defined an ordering* of the content. When displayed, such content would visually appear in an order at least in part according to the tagging. Thus, Wyler teaches serial data received with a defined *initial ordering of the content*).
- *analyzing the serial data of the electronic document by at least one transformation module to determine an order of presentation of the portions of the content different from the order defined by the serial data* (at least Col. 11,

line 38 through Col. 12, line 29; Col. 14, line 59 through Col. 17, line 40; Col. 27, line 16 through Col. 28, line 50 → content from any web-site, in any initial format or layout is parsed, analyzed (filtered), and converted to an intermediate scripting language. The scripting language conversion creates objects for each of the identified components of the received web page and allows for easier manipulation of the contents. Once analyzed and converted to objects, each of the objects are given a weight according to rules governing where the content object is located both physically on the page, and logically within the page structure. Once the content objects are weighted, they can be reconstructed, for example, into a book style document, which through various means acts to reorder or otherwise change (i.e., add or remove) the content according to the style of document that the content is being mapped into (see Col. 17, line 41 through Col. 22, line 6).

One goal of converting to an intermediate scripting language, creating objects, and reconstructing a document in this way is to generate output capable of being displayed and used on devices with lesser capabilities, for example, in terms of screen size (see Col. 29, line 61 through Col. 30, line 12 particularly item b. stating, *"the order in which information is displayed may be changed e.g. such that important contexts precede less important contexts."*).

Thus, Wyler also teaches:

- *the different order of presentation being adapted based upon a performance capability of a display of a target device* (e.g. screen size of wireless device; see Col. 12, lines 32-37).

Wyler further discloses:

- *generating reorganization information for use in delivering the portions of the content, the reorganization information enabling presentation of the portions in the different order* (Col. 16, line 36 through Col. 17, line 40; Col. 17, line 44 through at least Col. 19, line 38 → content can be reordered according to its importance established by assigned weights. During reconstruction, a new document is created and content is placed according to its importance governed by weights assigned to each content component).

Wyler fails to disclose:

- *in which the reorganization information includes a hyperlink to be displayed near the beginning of a first sub-document of the portions in the different order, the hyperlink pointing to a particular portion of the content that is not at a beginning of the order defined by the serial data.*

However, Hirose discloses *in which the reorganization information includes a hyperlink to be displayed near the beginning of a first sub-document of the portions in the different order, the hyperlink pointing to a particular portion of the content that is not at a beginning of the order defined by the serial* data

(Abstract; Col. 17, lines 45-52; Fig. 29 → Hirose generally describes the reorganization of web content as a function of the client requesting the web content. More specifically, Hirose's invention changes the structure and content of requested web content so that it is useable and viewable on client devices with limited capabilities (e.g., small screen). This is perhaps best illustrated by Figure 29 which shows two structures of web content; the left-hand tree for a “large” screen, two-dimensional display, the right-hand tree for a “small” screen. The two-dimensional layout is changed to a linear display that also considers the priority of the content. In comparing the two representations of web content depicted in Fig. 29, one can clearly see that some content is omitted, and the remaining content is reordered by priority in going from "large" to "small" screens. Buttons for navigating between pages (the NEXT and PREV buttons) are also automatically generated so that a user can easily navigate divided pages.

Thus, Hirose provides modified/reordered web content for a “small” screened device containing hyperlinks (NEXT and PREV) buttons to the next or previous page.

Typically, and as well-known to those of ordinary skill in the art at the time of invention, a first page of a plurality of pages such as those generated by Hirose would contain only a NEXT button (hyperlink); the NEXT button directing the user, upon selection, to a later page in the multi-paged web content. It is also clear that a top page/content for the “large” screen would not be identical to the top page/content for the "small" screen.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler and Hirose as both inventions are related to the reformatting of web content for devices with limited capabilities. Adding the disclosure of Hirose provides the benefit of changing navigation controls in original content to similarly function in reformatted content.

In regard to independent Claim 36, Wyler discloses:

- *A method* (at least Col. 2, lines 33-40; Figs. 18A-C → generally, Wyler's invention uses an intermediate server that interconnects the source of requested content with the wireless device. Either some or all of the processing that converts the original source content to forms suitable for the wireless device takes place on the intermediate server), *comprising:*
    - *receiving a request from a remote device for a portion of a document represented by serial data that contains content of the document and defines an order in which respective portions of the content are to be presented on a display for viewing* (at least Col. 1, line 54 through Col. 2, line 40; Col. 27, line 16 through Col. 28, line 50 → describes a method for processing information received by a wireless device over a computer network from at least one source of information (e.g., markup languages such as HTML, Rich Text Format, Scripts; see Col. 11, line 38 through Col. 12, line 29), parsing at least some of the information and employing at least some results of the parsing to provide the information in a form

suitable for display to a user on the wireless device. Markup language sources of content, such as HTML markup, were known by those of ordinary skill in the art at the time of invention to typically contain markup tags which at least in part, implicitly *defined an ordering* of the content. When displayed, such content would visually appear in an order at least in part according to the tagging. Thus, Wyler teaches serial data received with a defined *initial ordering of the content*),

- *in response to the request, analyzing the serial data of the electronic document by at least one transformation module to determine an order of presentation of the portions of the content different from the order defined by the serial data* (at least Col. 11, line 38 through Col. 12, line 29; Col. 14, line 59 through Col. 17, line 40; Col. 27, line 16 through Col. 28, line 50 → content from any web-site, in any initial format or layout is parsed, analyzed (filtered), and converted to an intermediate scripting language. The scripting language conversion creates objects for each of the identified components of the received web page and allows for easier manipulation of the contents. Once analyzed and converted to objects, each of the objects are given a weight according to rules governing where the content object is located both physically on the page, and logically within the page structure. Once the content objects are weighted, they can be reconstructed, for example, into a book style document, which through various means acts to reorder or otherwise change (i.e., add or remove)

the content according to the style of document that the content is being mapped into (see Col. 17, line 41 through Col. 22, line 6).

One goal of converting to an intermediate scripting language, creating objects, and reconstructing a document in this way is to generate output capable of being displayed and used on devices with lesser capabilities, for example, in terms of screen size (see Col. 29, line 61 through Col. 30, line 12 particularly item b. stating, *"the order in which information is displayed may be changed e.g. such that important contexts precede less important contexts."*).

Wyler also discloses:

- *the different order of presentation being adapted based upon a performance capability of a display of a target device* (e.g. screen size of wireless device → see Col. 12, lines 32-37).

- *returning at least one and fewer than all of the portions of the content using reorganization information that enables presentation of the portions in the different order* (as part of the conversion of the source document into M2O (intermediate) Script Language (2nd Level), Wyler's application removes irrelevant information (images and data i.e. advertising banners, links to unrelated issues) from the source document (webpage)). Thus, Wyler can create a new document that has less than the original document content-wise and return the document to the target device.

Wyler fails to disclose:

- *in which the reorganization information includes a hyperlink to be displayed near the beginning of a first sub-document of the portions in the different order, the hyperlink pointing to a particular portion of the content that is not at a beginning of the order defined by the serial data.*

However, Hirose discloses *in which the reorganization information includes a hyperlink to be displayed near the beginning of a first sub-document of the portions in the different order, the hyperlink pointing to a particular portion of the content that is not at a beginning of the order defined by the serial data* (Abstract; Col. 17, lines 45-52; Fig. 29 → Hirose generally describes the reorganization of web content as a function of the client requesting the web content. More specifically, Hirose's invention changes the structure and content of requested web content so that it is useable and viewable on client devices with limited capabilities (e.g., small screen). This is perhaps best illustrated by Figure 29 which shows two structures of web content; the left-hand tree for a “large” screen, two-dimensional display, the right-hand tree for a “small” screen. The two-dimensional layout is changed to a linear display that also considers the priority of the content. In comparing the two representations of web content depicted in Fig. 29, one can clearly see that some content is omitted, and the remaining content is reordered by priority in going from "large" to "small" screens. Buttons for navigating

between pages (the NEXT and PREV buttons) are also automatically generated so that a user can easily navigate divided pages.

Thus, Hirose provides modified/reordered web content for a “small” screened device containing hyperlinks (NEXT and PREV) buttons to the next or previous page.

Typically, and as well-known to those of ordinary skill in the art at the time of invention, a first page of a plurality of pages such as those generated by Hirose would contain only a NEXT button (hyperlink); the NEXT button directing the user, upon selection, to a later page in the multi-paged web content. It is also clear that a top page/content for the “large” screen would not be identical to the top page/content for the "small" screen.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler and Hirose as both inventions are related to the reformatting of web content for devices with limited capabilities. Adding the disclosure of Hirose provides the benefit of changing navigation controls in original content to similarly function in reformatted content.

In regard to Claim 38, Claim 38 merely recites a data structure stored on a medium and capable of configuring a machine to respond to requests from the

method of Claim 1. Thus, Wyler in view of Hirose discloses every limitation of Claim 38, as indicated in the above rejection for Claim 1.

In regard to Claim 41, Claim 41 merely recites an apparatus for carrying out the method of Claim 1. Thus, Wyler in view of Hirose discloses every limitation of Claim 41, as indicated in the above rejection for Claim 1.

In regard to Claim 42, Claim 42 merely recites an apparatus (machine) for carrying out the method of Claim 1. Thus, Wyler in view of Hirose discloses every limitation of Claim 42, as indicated in the above rejection for Claim 1.

In regard to Claim 53, Claim 53 merely recites an apparatus (display) for carrying out the method of Claim 1. Thus, Wyler in view of Hirose discloses every limitation of Claim 53, as indicated in the above rejection for Claim 1.

In regard to Claim 56, Claim 56 merely recites a computer program product for carrying out the method of Claim 1. Thus, Wyler in view of Hirose discloses every limitation of Claim 56, as indicated in the above rejection for Claim 1.

In regard to dependent Claim 2, Wyler discloses:

- *the serial data representing the electronic document is expressed in a markup language* (at least Col. 11, lines 39-67 → web source page is scanned for markup languages (e.g., HTML, WML), scripting languages, rich text format, etc.; Col. 14, line 60 through Col. 16, line 34 → discusses processing that typically would occur to document components associated with a markup language (links, images, tables, etc.)).

In regard to dependent Claim 3, Wyler discloses:

- *the markup language comprises a hypertext markup language* (at least Col. 11, lines 39-67 → web source page is scanned for markup languages (e.g., HTML, WML)).

In regard to dependent Claim 7, Wyler discloses:

- *the hypertext markup language comprises HTML* (at least Col. 11, lines 39-67 → web source page is scanned for markup languages (e.g., HTML, WML)).

In regard to dependent Claim 8, Wyler discloses:

- *the markup language comprises PDF, postscript, SGML, PowerPoint, rich text, or unformatted text* (at least Col. 11, lines 39-67 → web source page is scanned for markup languages (e.g., HTML, WML), scripting languages, rich text format, etc.).

In regard to dependent Claim 9, Wyler discloses:

- *the content of the document includes at least one of the following: text, images, tables, frames, and headings* (at least Col. 15, line 32 through Col. 16, line 33 → describes identification of document content components including links, text, images, and tables).

In regard to dependent Claim 10, Wyler fails to disclose:

- *the different order in which the respective portions of the content are to be presented includes a two-dimensional layout*.

However, Hirose discloses *the different order in which the respective portions of the content are to be presented includes a two-dimensional layout* (see Figure 30 → depending on screen size 320x240 versus 240x180, Hirose can generate a 2-D layout (see underlying page associated with 320x240 resolution containing what appears to be two columns, with one containing an image and another containing text). Generally, Hirose can adjust depending on the amount of screen space available on the client.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler and Hirose as both inventions are related to the reformatting of web content for devices with limited capabilities. Adding the disclosure of Hirose provides the benefit of changing

navigation controls in original content to similarly function in reformatted content.

In regard to dependent Claim 11, Wyler discloses:

- *the reorganization information includes an identification of a relative importance of the respective portions of the content* Col. 16, line 36 through Col. 17, line 40; Col. 17, line 44 through at least Col. 19, line 38 → content can be reordered according to its importance established by assigned weights During reconstruction, a new document is created and content is placed according to its importance governed by weights assigned to each content component).

In regard to dependent Claim 12, Wyler discloses:

- *the reorganization information includes an identification of a main block of text* (Col. 12, lines 14-30 → the system takes advantage of how a typical web page's contents are laid out both physically on the page and logically by content by a designer (in regions) to assist in determining the various parts (e.g., main block of text) contained in the web page and to eventually convert those identified components into M2O scripting).

In regard to dependent Claim 13, Wyler discloses:

- *the analyzing includes finding an annotation inserted in the electronic document as a marker of the location of the main block of text* (Col. 12, lines 14-30 → the system takes advantage of how a typical web page's contents are laid out both physically on the page and logically by content by a designer (in regions) to assist in determining the various parts (e.g., main block of text) contained in the web page and to eventually convert those identified components into M2O scripting. Content is then plugged into a template according to the region defined for it. The defined regions act as *markers or annotations* indicating the various regions of content. In this way, the system can later identify the beginnings and endings of these regions and assign them to particular web page components and convert those components to M2O scripting).

In regard to dependent Claim 14, Wyler discloses:

- *the reorganization information associates a revised order for presentation with at least some of the portions of content* (Col. 16, line 36 through Col. 17 line 40 → describes how various components of a received web page are identified, converted to M2O script objects, and then assigned weights based on physical, logical location of the object in the page as well as its relationship to a base or main object. All of these weights are then evaluated and go into determining what the output document contains when constructed will look

like and what it will and won't contain). Thus, Wyler, in creating a revised document for a mobile device uses the weighting to determine the content and layout of the document displayed on the mobile device.

In regard to dependent Claim 16, Wyler discloses:

Note: For purposes of examination, this claim is interpreted as generally describing aspects of navigational hyperlinks that are typically added to assist with quickly locating various reorganized/reordered components of the document created for the mobile device. Typically, hyperlinks are not added to link to content on the same viewable portion of the screen. Rather, they are added when the content they link to is not currently displayed.

- *the hyperlink is included only if the location of the hyperlink in the document is separated by at least a predetermined distance from the location to which it points* (Col. 32, line 23 through Col. 35, at least to line 28 → describes a method for formatting a small display to contain objects that are determined to be retained (e.g., by their importance, weight). Among these is the creation of navigational components (i.e., Navigation Bar, Link Cluster). Both of these navigational components assist the user in navigating the created web page on the mobile device (see also Figs. 25-28; a Link Cluster is shown in Fig. 25 "Home" "Archives", etc. The “Home” link would represent a link added to link back to the home page or top of the page which is currently not displayed in Fig. 25).

In regard to dependent Claim 17, Wyler fails to explicitly disclose:

- *reorganization information causes an automatic redirection from the first portion of the content to a later portion of the content when the document is opened for presentation by directing a user to the later portion in response to opening the document*.

However, it would have been obvious to one of ordinary skill in the art of web design at the time of invention to have added or inserted, for example, a HTML META command of the type <meta http-equiv="refresh" content="0; URL=http://<a relative link would go here"> to the reorganization information directing the new document created for the mobile device, providing the benefit of quickly directing the user of the mobile device to content deemed perhaps more important or critical or timely.

In regard to dependent Claim 19, Wyler discloses:

- *the different order of presentation enabled by the reorganization information is adapted for a display that has a more restricted performance capability than does the performance capability of the display for which the document was originally desired* (at least Col. 27, lines 29-38; Figs 18A-C → describes the process of receiving content originally from a web site designed with a desktop user in mind, and processing that content to generate a revised document suitable for display (i.e., adapted for a display that has a more restricted performance capability) on a wireless telephone, which would have

had a more restricted performance capability than would a desktop computer).

In regard to dependent Claim 20, Wyler discloses:

- *the more restricted display is part of a mobile phone of personal digital assistant, and the display for which the document was originally designed comprises a desktop computer* (at least Col. 27, lines 29-38; Figs 18A-C → describes the process of receiving content originally from a web site designed with a desktop user in mind, and processing that content to generate a revised document suitable for display (i.e., adapted for a display that has a more restricted performance capability) on a wireless telephone, which would have had a more restricted performance capability than would a desktop computer).

In regard to dependent Claim 22, Wyler discloses:

- *analyzing includes identifying one of the portions as containing main content of the document* (at least Col. 23, line 12-18 → among the components of the originally received web page identified is the "Body Text" or the main text object).

In regard to dependent Claim 23, Wyler discloses:

- *generating includes inserting the hyperlink to point to the beginning of the main content portion* (Col. 32, line 23 through Col. 35, at least to line 28 → describes a method for formatting a small display to contain objects that are determined to be retained (e.g., by their importance, weight). Among these is the creation of navigational components (i.e., Navigation Bar, Link Cluster). Both of these navigational components assist the user in navigating the created web page on the mobile device (see also Figs. 25-28; a Link Cluster is shown in Fig. 25 "Home" "Archives", etc. The “Home” link, for example, would represent a link added to link back to the home page or top of the page which is currently not displayed in Fig. 25).

In regard to dependent Claim 24, Wyler discloses:

- *generating includes moving the main content portion to near the beginning of the document* (Col. 16, line 36 through Col. 17, line 40; Col. 17, line 44 through at least Col. 19, line 38 → content can be reordered according to its importance established by assigned weights During reconstruction, a new document is created and content is placed according to its importance governed by weights assigned to each content component. A “central content portion” would have typically been given a high weight by the system of Wyler and thus its final position in the document would have changed likely to the beginning of the document).

In regard to dependent Claim 25, Wyler discloses:

- *generating includes altering the document so that the main content portion appears first when the document is presented* (Col. 16, line 36 through Col. 17, line 40; Col. 17, line 44 through at least Col. 19, line 38 → content can be reordered according to its importance established by assigned weights During reconstruction, a new document is created and content is placed according to its importance governed by weights assigned to each content component. A "central content portion" would have typically been given a high weight by the system of Wyler and thus its final position in the document would have changed likely to the beginning of the document).

In regard to dependent Claim 29, Wyler discloses:

- *analyzing includes identifying portions of the document that should be moved relative to other portions in generating the reorganization information* (at least Col. 24, lines 15-41; Fig. 12 → represents a Book format style that the content components of the originally received web page, identified and converted to objects can be organized into. For the original component objects (not filtered out) to fit within the Book format style (i.e., template), many of the original component objects are necessarily relocated/reorganized to comply with the Book format style requirements. Wyler also assures that related content remains connected (e.g., via Navigational bars, and hyperlinks which may appear in locations different from the content they're directed to).

In regard to dependent Claim 30, Wyler discloses:

- *the portions that should be moved comprise images or tables* (Col. 16, line 36 through Col. 17, line 40; Col. 17, line 44 through at least Col. 19, line 38 → content can be reordered/reorganized according to its importance established by assigned weights. Any images, tables, or any other sort of content that did not get filtered out as being irrelevant, could have been relocated/reordered in the construction of the new document where the specific content components are placed according to their importance governed by weights assigned to each content component such as images or tables.).

In regard to dependent Claim 31, Wyler discloses:

- *analyzing includes identifying regions according to functions* (at least Col. 21, line 60 through Col. 23, line 42 → depicts numerous content types, some of which perform specific functions such as advertising, linking, etc.).

In regard to dependent Claim 32, Wyler discloses:

- *the functions include navigation and content* (at least Col. 23, lines 13-25 → depicts numerous content types, including body text and navigation (hyperlinks)).

In regard to dependent Claim 33, Wyler discloses:

- *the analyzing includes converting the document to a tree format* (Col. 31, lines12-35, Figs. 28, 34-35 → depicts an example of an object tree generated by parsing the webpage of Fig. 28 (original page), except for the children of element 88 (Table), which themselves form an object tree and which are not illustrated in FIG. 34. The objects in the object tree are graded in step 1660, in order to assign a weight to each object in the tree. In step 1670, a decision is made by thresholding the weights determined in step 1660. Typically, different thresholds are used for different types of objects. For example, text objects may have a lower threshold than image objects. Generally, object types for which there is a high degree of confidence that their weights accurately reflect their importance are assigned a relatively high threshold. Conversely, object types for which there is a low degree of confidence that their weights accurately reflect their importance are assigned a relatively low threshold to prevent important information from being inadvertently discarded).

In regard to dependent Claim 34, Wyler discloses:

- *the analyzing includes blocking major regions of the document by dividing the major regions into respective blocks* (at least Figs. 2-3, and 6 → Figures 2 to 3 depict Wyler's invention dividing original content (Fig. 2) into blocks).

In regard to dependent Claim 35, Wyler discloses:

- *the analyzing includes counting characters of text* (Col. 31, lines 41-55 → describes that words are counted as a part of a "word matching" function which in turn is a part of the determination and weighting of text objects. Words contain characters).

In regard to dependent Claim 37, Wyler discloses:

- *receiving other requests for portions of the content of the document, and in response to the requests, returning other portions of the content using the reorganization information* (see Figs. 18A-C → each of these figures depicts different types of mobile devices capable of requesting content. The requested content for each of these different devices would be processed and an appropriate content would be then provided to each of these devices constructed according to an output style chosen and what fits on the screen of the device).

In regard to dependent Claim 39, Wyler discloses:

- *the data structure also includes the content, the data being expressed as a modified version of an original data structure that expressed the document* (at least Col. 11, line 41 through Col. 12, line 9 → Wyler generally discloses the steps of receiving an original web page, analyzing the web page to identify the various components, which would include content, converting that content

to objects, determining which objects to keep and which ones to omit, and constructing a new document suitable for display on a mobile device such as a phone or PDA. In doing so, a new "data structure" in at least the form of a modified/reordered/reorganized mobile friendly document is generated comprising at least some of the original content).

In regard to dependent Claim 40, Wyler discloses:

- *the modified version of the data structure includes annotations* (at least Col. 24, lines 53 -67 → describes an auto detection of style selected for the output document content to be mapped into and includes the annotation of, for example, Date and Time, user information, etc.).

In regard to Claims 43 and 45, Claims 43 and 45 merely recite a data structure stored on a medium and capable of configuring a machine to respond to requests from the method of Claims 14 and 17, respectively. Thus, Wyler in view of Hirose discloses every limitation of Claims 43 and 45, as indicated in the above rejections for Claims 14 and 17.

In regard to Claims 46 and 47, Claims 46 and 47 merely recite a data structure stored on a medium and capable of configuring a machine to respond to requests from the method of Claims 19, and 20, respectively. Thus, Wyler in

view of Hirose discloses every limitation of Claims 46 and 47, as indicated in the above rejections for Claims 19 and 20.

In regard to Claims 49 and 50, Claims 49 and 50 merely recite an apparatus for carrying out the method of Claims 19 and 20, respectively. Thus, Wyler in view of Hirose discloses every limitation of Claims 49 and 50, as indicated in the above rejections for Claims 19 and 20.

In regard to Claims 51, and 52, Claims 51, and 52 merely recite an apparatus (machine) for carrying out the method of Claims 19, and 20, respectively. Thus, Wyler discloses every limitation of Claims 51, and 52, as indicated in the above rejections for Claims 19, and 20.

In regard to Claims 54 and 55, Claims 54, and 55 merely recite an apparatus (display) for carrying out the method of Claims 19 and 20, respectively. Thus, Wyler in view of Hirose discloses every limitation of Claims 54 and 55, as indicated in the above rejections for Claims 19 and 20.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyler in view of Hirose, and in further view of Raghunandan (U.S. Patent No. 6,775,689 filed 06/07/2000, issued 08/10/2004).

In regard to dependent Claim 4, Wyler and Hirose fail to explicitly disclose:

- *the serial data is in an email format*.

However, Raghunandan discloses *the serial data is in an email format* (see Abstract → describes a method for restructuring email messages for transmission to a plurality of recipients by providing transmission control directives and email content segment identifiers supplied by the user, parsing the said directives and email contents, expanding aliases wherever necessary and applying the said directives to restructure the email contents and further including reordering selected identified segments identified by a user in a defined sequence prior to transmission).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler, Hirose and Raghunandan since all three inventions are related to the restructure and reorder of content in various document types. Adding the disclosure of Raghunandan provides the benefit of including among those various document types email documents.

In regard to dependent Claim 5, Wyler and Hirose fail to explicitly disclose:

- *the electronic mail format includes a header and a main body*.

However, Raghunandan discloses *the electronic mail format includes a header and a main body* (Col. 10, lines 15-61 → clearly shows the structure of an email including header and main body).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler, Hirose and Raghunandan since all three inventions are related to the restructure and reorder of content in various document types. Adding the disclosure of Raghunandan provides the benefit of including among those various document types email documents.

In regard to dependent Claim 6, Wyler and Hirose fail to disclose:

- *the analyzing includes determining the start of the main body*.

However, Raghunandan discloses *the analyzing includes determining the start of the main body* (Col. 6, lines 41-44 → the email system parses the said message to identify each segment as well as the list of recipients for each segment, as shown in block (1.2)). In doing so, Raghunandan would have identified the main body of the email.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler, Hirose and Raghunandan since all three inventions are related to the restructure and reorder of content in various

document types. Adding the disclosure of Raghunandan provides the benefit of including among those various document types email documents.

Claims 21 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyler in view of Hirose, and in further view of Ma et al. (hereinafter Ma, "A Framework for Adaptive Content Delivery in Heterogeneous Network Environments", Copyright 01/2000).

In regard to dependent Claim 21, Wyler and Hirose fail to disclose:

- *presentation of the portions of the content comprises presenting the portions by speech synthesis*.

However, Ma discloses *presentation of the portions of the content comprises presenting the portions by speech synthesis* (Pg. 3, Sec. 3.2 → Ma discloses a Modality Transform that includes speech-to-text and text-to-speech transform that transforms content into speech for use on a mobile device).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the disclosures of Wyler, Hirose and Ma as all three inventions are related to modifying original content to be suitable for mobile devices. Adding the disclosure of Ma provides the benefit of converting text content to speech to assist the vision-impaired.

In regard to Claim 48, Claim 48 merely recites a data structure stored on a medium and capable of configuring a machine to respond to requests from the method of Claim 21. Thus, the combination of Wyler, Hirose and Ma discloses every limitation of Claim 48, as indicated in the above rejection for Claim 21.

Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyler in view of Hirose, and in further view of Kanevsky (U.S. Patent No. 6,300,947 filed 07/06/1998, issued 10/09/2001).

In regard to dependent Claim 26, Wyler and Hirose fail to explicitly disclose:

- *analyzing includes identifying portions of the document that should not be separated in generating the reorganization information*.

However, Kanevsky discloses *analyzing includes identifying portions of the document that should not be separated in generating the reorganization information* (at least Col. 11, lines 64-67; Col. 12, lines 1-12 → amongst the criteria for making priority decisions in order to determine what and how to display web objects is how the web objects depend from or are associated with each other).

In addition, Kanevsky discloses (Col. 14, lines 15-28 → that web objects that contain or point to information with the same or similar topics are combined into one set.

Kanevsky further discloses (Col. 14, lines 58-67 → a semantic interpreter module that separates objects on web pages that refer to different topics and combines (unifies) objects that refer to the same or similar subjects.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Wyler, Hirose and Kanevsky as all three inventions relate to adapting content based on conditions. Adding the teaching of Kanevsky provides the benefit of fitting the content of a web page into a variety of display types and sizes.

In regard to dependent Claim 27, Wyler and Hirose fail to explicitly disclose:

- *the portions that should not be separated include at least one of the following pairs: heading and text, image and caption,* or that *paragraph and related paragraph*.

However, Kanevsky discloses *the portions that should not be separated include at least one of the following pairs: heading and text, image and caption,* or that *paragraph and related paragraph* (at least Col. 14, lines 15-57 → depicts numerous headings associated with links that direct the reader to the associated content (text)).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Wyler, Hirose and Kanevsky as all three inventions relate to adapting content based on conditions. Adding the teaching of Kanevsky provides the benefit of fitting the content of a web page into a variety of display types and sizes.

In regard to dependent Claim 28, Wyler and Hirose fail to explicitly disclose:

- *analyzing includes identifying portions of the document that should not be moved relative to other portions of the document.*

However, Kanevsky discloses *analyzing includes identifying portions of the document that should not be moved relative to other portions of the document* (at least Col. 15, lines 30-37 → describes a semantic interpreter module that may define what can be deleted or moved. Hence, it would have also determined *what could not be deleted or moved*).

In addition, Kanevsky discloses (Col. 14, lines 15-28 → that web objects that contain or point to information with the same or similar topics are combined into one set.

Kanevsky further discloses (Col. 14, lines 58-67 → a semantic interpreter module that separates objects on web pages that refer to different topics and combines (unifies) objects that refer to the same or similar subjects.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the teachings of Wyler, Hirose and Kanevsky as all three inventions relate to adapting content based on conditions. Adding the teaching of Kanevsky provides the benefit of fitting the content of a web page into a variety of display types and sizes.

Response to Arguments

Applicant's arguments are based on the prior art of Wyler and the claim limitation amended to the independent claims originally contained in both claims 15 and 44. The Examiner generally agrees with Applicant's arguments in that Wyler, at most, suggests that the content is reorganized, but is specifically silent as to whether or not the "link cluster" is reorganized to accommodate the content reorganization. Therefore, the Examiner withdraws the 102(e) rejection. A new rejection is put forth using the prior art of Wyler in view of Hirose. Hirose discloses a very similar system and does clearly indicate the placement of navigation links on reformatted web content linking to pages occurring later in the sequence of priority-ordered pages.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Blackwell whose telephone number is (571)272-4089. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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06/25/2008

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